

Appendix B  
**Clean** Version of  
Claims 4, 7, 10~12, 14 and 15  
(With amendments incorporated)

*A1*  
4. (once amended) A stabilized AlPO<sub>4</sub> composition having a β cristobalite structure, and comprising XO, SiO<sub>2</sub> and AlPO<sub>4</sub> at a ratio of greater than 0 to less than about 4 mole percent XO, greater than 0 to less than about 10 mole percent SiO<sub>2</sub>, and greater than about 86 to less than about 100 mole percent AlPO<sub>4</sub>, wherein X is any cation with an atomic radius of about 1 angstrom that fits stably within the interstices of the cristobalite structure.

*A2*  
7. (once amended) A method for stabilizing AlPO<sub>4</sub> ceramic microstructures comprising the steps of:  
a) admixing an acidic solution of AlPO<sub>4</sub> to solutions of SiO<sub>2</sub> and a calcium oxide source wherein the mole percent ratios are greater than about 86 to less than about 100 AlPO<sub>4</sub>, greater than 0 to less than about 10 SiO<sub>2</sub>, and greater than 0 to less than about 4 calcium oxide source;  
b) forming a slurry from the admixture formed in step (a);  
c) removing water from the slurry formed in step (b) to form a precipitate; and  
d) heating the precipitate.

*A3*  
10. (once amended) The method of Claim 7, 8 or 9 wherein the mole percent ratios are 0 to about 3 calcium oxide source, 0 to about 6 SiO<sub>2</sub>, and about 91 to about 100 AlPO<sub>4</sub>.

11. (once amended) The method of Claim 7, 8 or 9 wherein the mole percent ratios are about 2.3 calcium oxide source, about 5.7 SiO<sub>2</sub>, and about 92 AlPO<sub>4</sub>.

*A3*  
*Cont*

12. (once amended) A single phase, cristobalite AlPO<sub>4</sub> composition that has a cubic structure, space group F-43m, with  $a \sim 7.2$  Angstroms at a temperature of less than about 270°C.

*A4*

14. (once amended) A composition according to Claim 12 comprising a silica dopant, and a dopant having a cation with an atomic radius of about 1 angstrom that fits stably within the interstices of the cristobalite structure.

15. (once amended) A composition according to Claim 14 wherein the dopant having a cation with an atomic radius of about 1 angstrom that fits stably within the interstices of the cristobalite structure is CaO.